

Amendments to the Claims:

1. (Currently Amended) A method, comprising:
providing a plurality of ~~InfiniBand~~ switches, wherein the plurality of ~~InfiniBand~~ switches are coupled to form a Clos network;
providing a plurality of sources coupled to the Clos network;
providing a plurality of destinations coupled to the Clos network;
calculating a plurality of routing trees for the plurality of ~~InfiniBand~~ switches;
calculating a plurality of ~~DLIDs~~ Destination Location Identifiers (DLID) and a set of forwarding instructions for each of the plurality of ~~InfiniBand~~ switches, wherein each of the plurality of DLIDs corresponds to one of the plurality of routing trees and one of the plurality of destinations; and
populating a forwarding table of each of the plurality of ~~InfiniBand~~ switches in the Clos network with the plurality of DLIDs and the set of forwarding instructions and wherein the forwarding instructions create paths appropriate to make the network operate as a strictly non-interfering network.
2. (Original) The method of claim 1, wherein each of the plurality of destinations is identified by a BaseLID.
3. (Original) The method of claim 1, wherein calculating the plurality of routing trees comprises for each spine node in the Clos network, calculating a shortest path from the spine node to each of the plurality of sources and each of the plurality of destinations.
4. (Currently Amended) The method of claim 1, wherein each of the plurality of routing trees comprises at least a portion of the plurality of ~~InfiniBand~~ switches and corresponding plurality of links that form a shortest path from one of the plurality of sources or one of the plurality of destinations to a spine node of the Clos network.
5. (Currently Amended) The method of claim 1, further comprising:

creating a packet at one of the plurality of sources, wherein the packet is addressed to one of the plurality of destinations;
executing a rearrangement algorithm for the Clos network;
assigning one of the plurality of DLIDs to the packet; and
the packet following a path through at least a portion of the plurality of InfiniBand switches from the one of the plurality of sources to the one of the plurality of destinations, wherein each of the portion of the plurality of InfiniBand switches forward the packet according to the one of the plurality of DLIDs assigned to the packet.

6. (Cancelled)

7. (Currently Amended) The method of claim 5, wherein the packet following the path comprises looking up the one of the plurality of DLIDs assigned to the packet in the forwarding table at each of the portion of the plurality of InfiniBand switches along the path from the one of the plurality of sources to the one of the plurality of destinations.

8. (Original) The method of claim 5, wherein calculating the plurality of routing trees comprises calculating the plurality of routing trees sufficient to execute the rearrangement algorithm.

9. (Currently Amended) The method of claim 5, wherein the packet following the path comprises each of the portion of the plurality of InfiniBand switches forwarding the packet in accordance with the one of the plurality of DLIDs assigned to the packet as found in the forwarding table at each the portion of the plurality of InfiniBand switches.

10. (Currently Amended) A method, comprising:
providing a plurality of InfiniBand switches coupling a plurality end nodes to form a network;
calculating a plurality of routing trees for the plurality of InfiniBand switches;
calculating a plurality of ~~DLIDs~~ Destination Location Identifiers (DLID) and a set of forwarding instructions for each of the plurality of InfiniBand switches, wherein each

of the plurality of DLIDs corresponds to one of the plurality of routing trees and one of the plurality of end nodes; and

populating a forwarding table of each of the plurality of ~~InfiniBand~~ switches in the network with the plurality of DLIDs and the set of forwarding instructions and wherein the forwarding instructions create paths appropriate to make the network operate as a strictly non-interfering network.

11. (Original) The method of claim 10, wherein the network is a Clos network.

12. (Original) The method of claim 10, wherein each of the plurality of end nodes comprises a destination, and wherein the destination is identified by a BaseLID.

13. (Original) The method of claim 10, wherein calculating the plurality of routing trees comprises for each spine node in the network, calculating a shortest path from the spine node to each of the plurality of end nodes.

14. (Currently Amended) The method of claim 10, wherein each of the plurality of routing trees comprises at least a portion of the plurality of ~~InfiniBand~~ switches and corresponding plurality of links that form a shortest path from one of the plurality of end nodes to a spine node of the network.

15. (Original) The method of claim 14, wherein the shortest path is loop-less.

16. (Cancelled)

17. (Currently Amended) A method, comprising:
providing a plurality of ~~InfiniBand~~ switches coupling a plurality sources and a plurality of destinations to form a Clos network;
creating a packet at one of the plurality of sources, wherein the packet is addressed to one of a plurality of destinations;
executing a rearrangement algorithm for the Clos network;

assigning one of a plurality of ~~DLIDs~~ Destination Location Identifiers (DLID) to the packet; and

the packet following a path through at least a portion of a plurality of ~~InfiniBand~~ switches from the one of the plurality of sources to the one of the plurality of the destinations, wherein each of the portion of the plurality of ~~InfiniBand~~ switches forward the packet according to the one of the plurality of DLIDs assigned to the packet and wherein the path is part of the Clos network operating as a strictly non-interfering network.

18. (Cancelled)

19. (Currently Amended) The method of claim 17, wherein the packet following the path comprises looking up the one of the plurality of DLIDs assigned to the packet in a forwarding table at each of the portion of the plurality of ~~InfiniBand~~ switches along the path from the one of the plurality of source to the one of the plurality of destinations.

20. (Currently Amended) The method of claim 17, wherein the packet following the path comprises each of the portion of the plurality of ~~InfiniBand~~ switches forwarding the packet in accordance with the one of the plurality of DLIDs assigned to the packet as found in a forwarding table at each the portion of the plurality of ~~InfiniBand~~ switches.

21. (New) The switch of claim 1, wherein the switch is an InfiniBand switch in compliance with an InfiniBand Architecture Specification.

22. (New) The switch of claim 10, wherein the switch is an InfiniBand switch in compliance with an InfiniBand Architecture Specification.

23. (New) The switch of claim 17, wherein the switch is an InfiniBand switch in compliance with an InfiniBand Architecture Specification.